DOCUMENT RESUME

ED 056 441 EC 040 482

AUTHOR Stott, D. H.
TITLE A Case of Pseudo-Retardation.
INSTITUTION Guelph Univ. (Ontario).
PUB DATE [71]
NOTE 26p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Behavior Change; *Case Studies; Clinical Diagnosis; *Exceptional Child Education; Maturation; *Mentally Handicapped; Parent Influence; *Role Playing

ABSTRACT

Review of a case study of a 4-year-old girl who assumed the role of a retardate reveals that the girl probably suffered multiple congenital impairments of a minor character that affected the central nervous system and the structures governing social behavior and maturation. The stated basis for pseudo-retardation is the person's ability to function at a normal level at certain times or in some areas. In a general discussion of pseudo-retardation, the author advocates that clinical diagnosis of retardation needs to include assessment of the motivational variable. The girl's mother is said to have accepted the diagnosis of temperamental abnormality and consequent retardation and to have reinforced the girl's dependence. The girl's normal eye movements are said to have suggested, however, that the girl knowingly controlled behavior of those around her. Behavior change principles implemented to change her dependent behavior and intellectural development are shown to be successful. It is concluded that the girl's excessive need for attachment after the age of 1 1/2 years motivated her mother to be overprotective, which the girl exploited with a guise of retardation. (CB)

ED056441

A Case of Pseudo-Retardation

D.H. Stott

The subject of this report is a four-year old girl who had assumed the role of retardate as a way of life, and had been diagnosed as such and placed in a Nursery for the Retarded. By means of a rehabilitatory program she was persuaded to abandon this role and to function at a normal level of mental ability. Experience with retarded children suggests that such cases are not uncommon, even though the reasons for their choice of the retardate's role may differ. The condition of pseudo-retardation may thus often remain undiagnosed, so that the child continues to be treated as a retardate, the evidence to the contrary being too dissonant with our conceptions and with the role that we have provided for them.

We cannot proceed further without defining our terms. The definition of mental deficiency given by the Manual of the American Association on Mental Deficiency (Heber, 1959) has been criticised (Garfield and Wittson, 1960, Halpern, 1970) for laying the chief stress upon current functioning. It sees social adjustment, broadly conceived, as one of the criteria for mental deficiency. Whereas it is recognized that failure thereof may result from intellectual deficit, no attempt is made to differentiate between the individual's intrinsic inability to meet the requirements of an independent life due to cognitive impairment and malfunctioning which is due to motivational aberration. It is upon this distinction that the concept of pseudo-retardation rests. In his current functioning the pseudo-retardate is indeed mentally retarded, but he may not be 'truly' retarded in the cognitive sense, as defined below, in that, once the motivational aberration is removed, he may be able to function at a normal intellectual level.

What makes us suspect that in some cases the child is not truly retarded is his apparent ability to function at a normal level at certain times or in some areas. This is the basic concept underlying Benton's pseudofeeblemindedness or psychogenic mental deficiency (Benton, 1962). He points out that among normal people a "subject-matter disability, as in mathematics or literature" is accepted without question. In other

EC 040 486

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

words, a normal person is permitted to be 'retarded' in some areas. If, however, the areas of retardation reach a certain size or impinge upon functions that are traditionally associated with 'low intelligence', the person is given the rating of retarded.

The detection of pseudo-retardation requires, in consequence, the systematic study and recording of an individual's functioning in a variety of situations over a period of time. The observed behaviors can then be classified as, on the one hand, demonstrating an ability to function at a level of complexity which enables him to operate effectively and to achieve his goals or, on the other, an inability to cope with situations at such a level. If there is an underlying consistency in such inconsistency of function we may begin to suspect pseudo-retardation.

The criterion of complexity enables us to differentiate between cognitive (true?) retardation and socially maladaptive behavior. In the case to be described the child operated at a high level of complexity in order to maintain a socially maladaptive, and indeed a 'retarded' role. Such a role would by any normal value-system be judged highly detrimental to the child's best interests in the long run, yet in the short run she was achieving a very effective manipulation of her human environment.

Benton likewise suggests that situational retardation, that is, pseudofeeblemindedness, may arise from motivational factors, instancing aversive conditioning by early unpleasant or traumatic experiences. Whereas the development of these "emotional blocks" cannot be denied, and indeed may be seen as important pseudo-adjustments, other authors (Chess, 1967, 1968; Stott, 1970) have drawn attention to primary handicaps of temperament, which would

appear to be congenital. Nevertheless, in using the word 'temperament' we have in turn to beware of falling into the trap of postulating yet another mystical 'essence' -- with the presumption of permanency -- against which Hunt (1961) warns in the concept of 'intelligence'. Empirically defined, a person's temperament represents the expectations about his behavior which have arisen because of his tendency to behave in more or less the same way in typical life-situations. It leaves open the reasons for the establishment of such behavioral regularities.

The concept of temperament -- or the adoption of consistent situational roles -- clarifies another source of confusion in the diagnosis of mental retardation which centers around the concept of a motivational or 'emotional' factor. These terms are variously and loosely used. In the present discussion the term 'emotional' although popular is avoided as being inaccurate. 'Motivation' is defined as comprising the factors which determine the individual's choice of goals, more precisely the types of relationship which the agent seeks to establish between himself and his world (Nissen, 1958). What looks at first sight like extremely ineffective functioning may -- in the light of his chosen goals -- be highly effective and 'intelligent'. He may decide to avoid coping with certain situations altogether, either because they are deemed unrewarding or because other goals demand non-coping. In the case of our girl, her highly effective role of dependency required consistent non-coping in everyday situations, and above all in any in which an adult demanded some achievement. Reduced to ultimate objectivity, the motivational variable is a matter of whether behaviors of a certain class

occur or not. This applies also to cognitive processes. De facto mental retardation may arise either because they are grossly impaired, or because they do not occur (or a combination of both). It is suspected that much mental r tardation is of a matter of the non-use of the cognitive functions, that is to say, is of motivational origin. Since the efficiency of the cognitive processes comes in question only when they occur, the motivational factor can be the overriding one. A formal intelligence-test does not distinguish between motivational and cognitive impairment. Failure on an item -- and hence the IQ as a whole -- may be due either to the subject's inability to operate at the requisite level of complexity or to a failure to initiate the cognitive processes. In the present case-study the apparent retardation was entirely of the latter sort. Once the cognitive processes were brought into play they were seen to be of normal quality.

It is tempting to accept the possibility of motivational retardation as an exceptional phenomenon while retaining the convenient traditional diagnosis in terms of 'mental level'. However, experience with many cases in a remedial clinic to which children were referred from primary departments of schools as slow learners led us to the view that practically all such cases are of motivational origin, without significant impairment of the cognitive processes as such. When it comes to the category of the 'trainable retarded', with a traditional IQ ceiling of 50-55, it is apparent that significant cognitive impairment exists in many, even though at a lesser level than is supposed. On the other hand, the use of a diagnostic system based upon the observation and recording of everyday

and learning behavior (Stott, 1971a) reveals that a considerable minority even of the 'trainable retarded' may be temperamentally (motivationally) rather than cognitively impaired.

It follows that because, as argued above, occurrence or non-occurrence of a process is more fundamental than its quality when it does occur, the first step in the diagnosis of retardation should be the assessment of the motivational variable. Such an approach requires the means of identifying and classifying temperamental factors in learning disability.

Mention can be made only of one type of temperamental impairment as being relevant to the discussion of the case. Chess recognizes it in her "slow-to-warm-up" type of child. Sontag (1962) stressed its aspect of social apprehensiveness. The writer and his collaborators (Stott and Sykes, 1956, Stott, 1971b) have named it unforthcomingness. The symptoms are a withdrawal from any situation, social or material, which contains an element of strangeness, uncertainty or supposed difficulty. Murphy (1962, p. 200) emphasizes the essential normality of feelings of this sort, but describes a very convincing case of a little girl who consciously decides to master her fears of thunder and of the doctor's and dentist's offices. What seems to be lacking in the unforthcoming child is not so much an abnormal fearfulness as a lack of the determination that this little girl showed to master normal fears. In the writer's view this may be conceptualized as an impairment of effectiveness-motivation (Stott, 1961) or, in White's (1959) terminology, of the urge towards competence. It is not the feelings of apprehensiveness which are diagnostically important so much as the actual withdrawal from or

avoidance of situations with which the normal child, even with some hesitation, decides to cope.

It is time to give an account of Jean, the subject of the present case-study. Just before her fourth birthday she had been admitted to a Nursery for mentally retarded on the recommendation of a psychologist and a public health nurse. No intelligence test was given because she was patently untestable. To all appearances she was severely retarded, and her extreme helplessness was the cause of considerable concern to the Nursery Director. Any attempt to bring her into an activity was met by turning away, lying on the floor and a pose of pity-exciting misery. This style of behavior was reinforced by the good-hearted but untrained helpers, who would pick her up and nurse her patiently whenever she adopted it, with the result that the greater part of her time in the Nursery was spent in someone's arms. She never mixed with other children or played with the toys available.

Jean became the subject of clinical study at the age of 4½. Interviewed at this time, the mother reported somewhat similar behaviors at home as regards the lethargy and the miserableness, but added that she would indulge in temper tantrums followed by sulking when she could not get her own way. However, she played well on the whole with her brother one year younger than herself, and -- most surprisingly -- usually took the lead.

The family consisted of five children ranging from 13 to 3 years, all of whom were stable and functioning well mentally except Jean, the fourth. The parents were also sensible and stable, and led a well-organized

middle-class life. The mother did not go out to work, but was taking Extension courses at the university. She had a Caribbean background, and although virtually white maintained the warm protective maternal role found in West Indian, Mediterranean and many other traditional cultures. She accepted that Jean was retarded and reinforced her dependence strategy in much the same way as did the Nursery helpers.

Observed from behind a one-way mirror in the Nursery, Jean's general manner certainly gave the appearance of severe retardation. There was, however, one telltale contraindication. Even when lying inert on the floor she would be following one adult or another with her eyes, presumably to gauge the effects on them of her behavior.

The first therapeutic objective was to halt the reinforcement of Jean's dependence strategy. A meeting was held with the Nursery helpers at which it was pointed out how she was able to command constant attention, and in fact very effectively controlled their behavior. They were led to see that so long as she was allowed to enjoy this form of fulfilment she would not progress, and there would be no means of finding out whether she was retarded or not. Very specific guidance was given to them never to pick her up when she collapsed whimpering on to the floor, and if she did not care to participate in the musical and other social activities she was simply to be ignored. With one or two lapses the helpers faithfully carried out this program.

A similar explanation and similar counselling were given to the mother. It was not anticipated that she would be able to carry out such a radical

change of attitude without further guidance, but throughout the treatment she showed the most commendable determination to cooperate.

The behavior-modification treatment in the Nursery began to show good results within a matter of days. Bored with lying unattended on the floor, Jean made her way over to the toy-corner and occupied herself with the toys. Within a short while she began to interact with other children (calling out of her repertoire her pattern of interaction with her younger brother).

At this stage she was included in a group of about her own age who were beginning the Flying Start Learning-to-Learn Program (Stott, 1971c). This consists in a programmedseries of puzzles and other play-activities for Kindergarten and pre-Kindergarten children, so designed that success can be achieved only if the requisite perceptual and cognitive processes are brought into play. It thus represents an adaptation of the principles of behavior-modification in the direction not of reducing undesirable but of producing desirable behavior. The types of activity correspond to the kinds of effect which a child naturally seeks to achieve at the behest of his need for effectiveness (Stott, 1961, White, 1959), and are thus spontaneously motivating. Since occurrence of cognitive processes is consistently reinforced the Program serves to correct those problem-solving strategies which for one reason or another (avoidance, impulsivity, etc.) result in non-occurrence.

The first item requires merely that the child join the two halves of a boldly drawn picture. In order to preclude mere trial-and-error fitting and to reinforce attention and cognitive rehearsal, the picture is divided

by a straight rather than by a curved cut such as is usually found in play-materials for the retarded. On being presented with this task Jean showed no sign of comprehending what was expected of her. Her lack of response could easily have been attributed to mental retardation, and would naturally have resulted in failure on an intelligence-test. However, despite her moping she followed closely with her eyes the successful efforts of the other three children. She resisted all cajoling to participate. Then the therapist, in the course of handing out fresh pieces to the others, laid in front of her the two halves of a picture only a short distance apart. He made no comment and paid no further attention to her. The other children joined their halves and were duly praised. Jean, forgetting momentarily her role of non-participant, could not resist pushing the two halves of her picture together. Attention was drawn to her accomplishment and she was fulsomely praised. In the next round another picture was placed in front of her with the halves similarly almost joined, and again without any injunction to participate. She put them together quickly this time. In each subsequent round the halves were placed a little further apart. It was obvious that they presented her with no perceptual or other mechanical difficulty. Finally each half was presented to her separately, and she completed the picture straightway.

The next week she completed the same picture cut into quarters. Progressively, also, she began playing happily with other children, and began experimenting in the use of an active, initiative-taking life-style. With little hesitation she embarked upon the next of the 'Flying Start' tasks,

which consisted of mailing small cards, each bearing a letter, into 'mail-boxes' bearing similar letters (see Figure 1). She concentrated on this activity with what the research assistant described as 'super-focus'. At the same time, as would be expected of a normal child, she became bored with the picture-completion.

A week later she was beginning to become more assertive and to exploit her new life-style to the point of being described as disruptive. She was reported as frequently smiling, and even laughing heartily, and showing an "exaggerated independence". In group activities she became competitive, trying to build a "biggie, biggie, biggie tower." The research assistant noted that "she does not lack competence in meddlesome activity".

The next week she had a partial relapse. The volunteer who had ministered to her all too affectionately returned after several weeks off duty and there was not time to brief her adequately in the new therapeutic strategy. Her presence evidently re-activated Jean's desire for control through dependence. She refused to answer her name in the circle. Half her time during the play activities she spent watching the movements of her favourite volunteers. Yet -- to quote from the Nursery Director's daily notes -- "participation and enjoyment amounted to a much greater part of the morning than non-participation and unhappiness". Notably she did excellently at the mailboxes.

Four days later she definitely opted for the outgoing, participating style as evidently bringing greater rewards. She sang a verse of a song by herself in the circle, became very affable and, after correctly identifying

the numbers 1 to 10 became quite "hyper" at her accomplishment. The only contretemps was when she cried at having to lie on a mat alone instead of having a volunteer beside her, but she stopped after two minutes of being ignored. During this period she began to wet her pants but desisted when she was made to visit the bathroom every hour.

At this time, some two months after the beginning of the treatment, her behavior was rated on the Effectiveness-Motivation Scale (Stott and Sharp, 1968). Descriptions of typical levels of effectiveness are scored from 0 to 4 in eleven areas of functioning, such as Building, Creative Play, Make-believe Play, Appeal of Novelty, Helping Others, Reactions to Strangers. She scored 30, which is half a standard deviation above the mean of 24 for a normal Nursery-school sample. This result showed that, contrary to first appearances, she could not be rated as in any way an unforthcoming child. Her occasional reluctance to tackle new tasks stemmed, in so far as it was not normal, rather from her harking back to a dependence/incompetence strategy.

A week later the Nursery Director was writing of Jean, "Behavior practically normal, very happy playing in a group with small cars. The quarter cards and the mailboxes seem too easy for her when she is in a cooperative mood". The next day she had her "best day ever" in the swimming baths, not only undressing and dressing herself but attempting to help dress the volunteer. She jumped into the pool willingly and bobbed her head under the water -- which is anything but characteristic of a temperamentally apprehensive child.

During the following weeks she maintained her happy, outgoing participating style with only slight lapses. She did not mind which volunteer worked with her, and she helped to organize the other children for various games and songs. On arrival she ran off from her mother eagerly in order to show how well she was doing at her activities. She made no attempt to interrupt her mother's socializing at the end of the sessions but busied herself by putting on her own coat, hat and boots. This transformation in her behavior and level of mental functioning had taken not quite three months. During the next few weeks it was apparent that Jean was out of place and had reached the limit of her progress in the Retarded Nursery. Also, since she was just turned five, it was important to prepare her for entry to a normal Kindergarten. It was therefore decided to introduce her to the Kindergarten group at the Centre for Educational Disabilities, composed of children referred as slow learners but, like Jean, showing for the most part faulty styles of learning behavior rather than poor ability.

On her first visit to the Centre she was brought by a Nursery volunteer who had been firm with her, and she settled down well to the learning activities. By now she could do the six-piece Puzzles and worked with a good, thoughtful strategy. However, she decided to test her earlier strategy of moodiness and fretting on the Centre volunteer, and whined for her mother, whom she knew would be fetching her. On subsequent visits she made sporadic, albeit successful efforts with the learning materials but continued to behave in a petulant way. The crisis came when we asked

the mother to leave her at the Centre and return to fetch her at the end of the session. This she was prepared to do, but Jean clung to her crying and the mother was in a helpless state of conflict between her old and new methods of handling the child. She was told -- in defiance of orthodox therapeutic practice -- to give Jean a smack on the bottom, send her into the playroom and then leave herself. She administered the smack in a half-hearted way and one of the Centre staff pulled Jean screaming into the play-room. This tactic was used in the confidence that Jean suffered from no genuine apprehensions but was making a last desperate effort to maintain an unprogressive strategy of control. Once in the room she stood against one of the playhouses whimpering, but characteristically watching the activities of the other children. After a minute or two she gave up the whimpering and just stood, sporadically making indecisive movements to join them. After just over five minutes a Kindergarten girl came up to her and said, "Do you want to come and play or stand there crying?". When the other child took her by the hand Jean followed her, and after a few minutes she participated in the cutting out of paper shapes. During the subsequent learning-activity session she made further attempts to manipulate the teacher by pouting, but when she saw this had no effect became friendly and talkative. She mentioned her wish to have yellow shoes to match her yellow dress (she could distinguish all the basic colours). By now she had reached the 8-piece Animal Puzzles, could do them surprisingly quickly, and was delighted with her success.

On subsequent visits the same alternation of strategies persisted, but with the dependent, moody one becoming progressively less frequent. She

could quickly see when the 'game was up'. One might say that she was now behaving like any rather spoilt four-year-old.

Intellectually she made great strides. She needed very little encouragement to do the final set of Animal Puzzles, of ten pieces, and they presented no difficulty to her. She overcame her resistance to the Matchers game, and eventually completed the first ten series. This item of the Flying Start program demands not only good problem-solving strategies but the use of fairly complex cognitive processes. For example, a picture of a pirate has to be matched from among a row of six which contain systematic variants (see Figure 2). In three the pirate is wearing a hat, in three he is bareheaded. This distinction has to be held in mind (cognitively 'stored') while the feet are examined. Two of the pirates have both feet intact, two have a wooden peg in lieu of the right leg and two a wooden peg in lieu of the left leg. Thus the child has to withhold his choice until he has made two successive discriminations, and for four out of the six the additional one of sidedness.

It is part of the compensatory program for slow-learning Kindergarten children in the above Centre to help them attain the elementary concepts of quantity and numeration, and also the phonic principle that letters represent sounds. Jean had already mastered the idea of counting, and played the Number games with success and enthusiasm. She provided us with our biggest surprise by her rapid mastery of phonic encoding. The method used is based on the little recognized fact that the learner must associate the letter-symbol not with a separately pronounced 'sound' but with the phoneme

as actually pronounced in the word-context. This method of teaching the phonic basis of reading, although more realistic and efficient, means that the child has to learn to listen to words and to associate their various beginning sounds with letters. Since, at the age of five years, very few children (Downing, 1970) know what is meant by a 'word', let along a 'sound', the associational task requires something more than simple paired-associate learning. By means of the Giant Touch Cards of the Programmed Reading Kit (Stott, 1962) the process is programmed into the stages, first of learning to listen to initial sounds, second, of noting the shapes of the letters, and, third, associating initial sound with letter. In the course of a game of some 15 minutes it is usual to teach a group of children only four such associations. In her first session, Jean learnt all nine of the first set, showing no lack of confidence or hesitation, and demanded to be allowed to go on to the next set of ten. She got all these correct except the 'k' (having previously had the same sound for 'c').

If, at the end of her two months in the Centre's Kindergarten group, she still had any temperamental handicap, it was that she never became a compliant child. She wanted to control her own world and to follow her own motivations. She would agree to do the things that pleased her, or, at a push, what was necessary as a means of being allowed later to do what she wished. If she rejected one learning activity it was usually because she preferred another. She had a wide range of strategems, such as feigning tired or wanting to go to the washroom, and could be seen to be continually appraising her chances of having her own way. One might attribute this de-

fect, if that it be, to her high effectiveness-motivation combined with a lack of social conditioning within the permissive atmosphere of her home. Her behavior resembled that of an intelligent younger child.

Some two weeks before the end of her time at the Centre Jean was given the Slosson Intelligence Test, which is of the Binet type although shorter. She gained an IQ of 91-93. Curiously, her main area of failure was that of number, over which she used elaborate avoidance techniques. Nor would she collaborate in the repetition of sentences. It was typical of her that although she could, or would,not tell the tester how many apples there were when there were only three, when the testing was over she drew ten apples (see Figure 3) and counted them correctly. She then drew the members of her family, with the correct number of children. Seeing the long ears she had given them she imaginatively called them pet rabbits. The drawings had good detail for a child of just over 5 years, and there is no sign of any impairment in muscular control.

In September Jean entered Kindergarten without fuss, and all went well for a few weeks. Thereafter she made another attempt at 'control' by temper tantrums, and the teacher found her unmanageable. She was admitted to a childrens' psychiatric hospital some distance from her home, where she stayed for two months and attended school. After two months back at home she again proved unmanageable, and this time the mother was taken in with her for three weeks and given training in how to manage her. This followed the behavior-modification procedures that had been used successfully with Jean previously. The mother evidently grasped the principle, because she

explained, "I make her do things now. I only reward her if she's done them". In the next September she entered Grade I. There had never been any doubts about her mental ability.

Up to this point Jean's temperamental abnormality and consequent retardation have been discussed in terms of her volitions, that is to say, her chosen way of controlling her world. For the planning of a therapuetic program the chief desiderata are the patient's life-style and, when it is a question of combatting retardation, the learning style. In thus emphasizing the understanding and modification of behavior there is nevertheless a danger of falling into a purely behavioristic position, where everything is viewed in terms of conditioning from a tabula rasa. In fact individual differences of temperament and hence of motivation cannot be wholely explained along such lines, and serious errors in treatment may arise if such assumptions are made. Notably, the extent of any constitutional impairment has also to be assessed, although this may become apparent only in the course of treatment. The style of behavior which the child is using at any one time is not necessarily the only one available. It may have been chosen in very early childhood owing to impairment or uneven development of the central nervous system; but over the ensuring years the damage or retardation may have been made good by the development of alternative structures, maturation or biochemical stabilization. In such cases the potentiality for a more effective behavioral style may be present but lies dormant because the earlier style has established itself as the dominant one. This is particularly notice-

able among impulsive, hyperactive children of Kindergarten age whose problem-solving strategies are those of guessing or -- in the eventof difficulty -- avoidance by distractibility. By means of a program which 'punishes' such tactics and reinforces cognition it is often possible to bring the hitherto dormant good strategies into operation. In sum, the clinician has always to be assessing the potential repertoire of the child at a given stage of development.

Almost certainly, any grossly abnormal style of behavior in a child reared within a stable home environment can be traced to some initial impairment which has limited normal development. The diagnostic problem is that the subtle derangements of those parts of the nervous system which govern behavior are not anatomically observable. All we can do is to note other indications of similarly subtle derangement in cognate structures, such as the motoric, speech and endocrine, and the reflexes controlling physical homeostasis. By the law of Multiple Congenital Impairment (Stott, 1966) such derangements confer a greater than chance probability of disturbance of the behavioral system.

Comprehensive diagnosis therefore requires as full an account as can be obtained of the child's developmental history. History-taking has fallen into disrepute because, being unsystematic, written reports differ so greatly as between one interviewer and another, and one can never be sure whether the absence of mention of a condition means that it was not present or whether the interviewer did not seek the information. In view of the need for a standard recording schedule the writer composed the Systematic Interview Guides

(Stott, 1965) covering the pregnancy and the child's life up to five years.

In Jean's case we had to enquire why she alone of the five siblings chose such an incapacitating life-style. It is true that the mother reinforced her dependency and acted on the conviction that she was retarded. But her other four children resisted the temptation to exploit her overprotection, at least to the point of complete dependence.

In effect, Jean's history was characteristic of that of many retarded children. Mothers' accounts of the pregnancy are often suspect owing to the suspicion that with their child's defect in mind they think back in order to discover some cause. Drillien and Wilkinson (1964) found a way around this methodological difficulty by asking the mother right at the beginning of the interview to what she attributed the child's condition. They found that in three-quarters of the cases the mothers could not suggest any cause. The same device was used in the Systematic Interview Guides. Jean's mother could not attribute her problems to anything. The Guide asks a number of very specific questions concerning stresses and illnesses found to be associated with impairment in the child (Stott, 1957). These elicited that the mother had had an unhappy pregnancy. During the second month her father had to have surgery for a ruptured appendix. During the seventh the family moved owing to the husband's change of job into a house that was cold and run down. They moved again when she was 8½ months pregnant. With her anxiety-prone temperament these events made her feel low and discouraged. During the year before Jean was born she had a duodenal ulcer and during the whole of the pregnancy suffered

from indigestion.

Jean had a breech birth although she had been turned a week previously. Two weeks before the birth an amniocentesis was done to determine whether blood transfusion would be required, the mother being Rh-negative. For 48 hours after the birth the infant was incubated owing to mucous congestion, and had a slight jaundice for the first five days. She lay passive without spontaneous flexion and extension of the limbs.

Her childhood was free of serious illnesses, but she had chronic colds in the nose and an allergy against cow's milk that brought on eczema. At 2½ years she suffered a single short grand mal seizure (her mother having had a series of such at exactly the same age).

Her developmental milestones were retarded. She did not crawl until 12 months, nor walk across the room unaided until 27 months. She began to put two or three words together at 24 months. At four years she was sometimes difficult to understand because, as the mother put it, "the words seem to come all together", but she could speak clearly if she took the time. She had been more inclined than her siblings to hurt herself by falling or bumping into things, although by four years this was becoming less frequent. Just before this age a psychiatrist had diagnosed her as a mild case of cerebral palsy, but as we knew her she was a normally coordinated child. This clumsiness and the jumbled speech suggested a sequencing derangement rather than impairment of motor function as such.

Perhaps the most telltale impairment for the understanding of her later dependency needs was that she did not smile at people or show evidence of

affection until she was 18 months old. From then on she became very clinging and could not bear to have her mother or other member of her family out of her sight. From about two years she lost her unnatural placidity and lethargy, and developed her pattern of temper tantrums followed by sulking. This excessive need for dependency and social interaction is not uncommon in children who fail to display normal early attachment behavior. It is tempting to conclude that they are belatedly making their way through the infantile phase of extreme dependency. All one can say for certain is that there was some derangement of the social-attachment behavior appropriate to each age.

A review of Jean's history suggests that she had suffered multiple congenital impairments of a minor character, affecting the central nervous system and especially the structures governing social behavior. However, these impairments seemed to be of the nature of faults of maturation. Given these, it is understandable that with her excessive needs for attachment after the age of 1½ years she became conditioned by her mother's overprotectiveness to exploit dependency and a guise of retardation as a means of social control which pervertedly satisfied her more-than-average need for effectiveness. In this sense she could be said to have 'chosen' retardation as a life-style, but in another sense it could be argued that it was determined for her by a combination of congenital impairment and a facilitating environment.

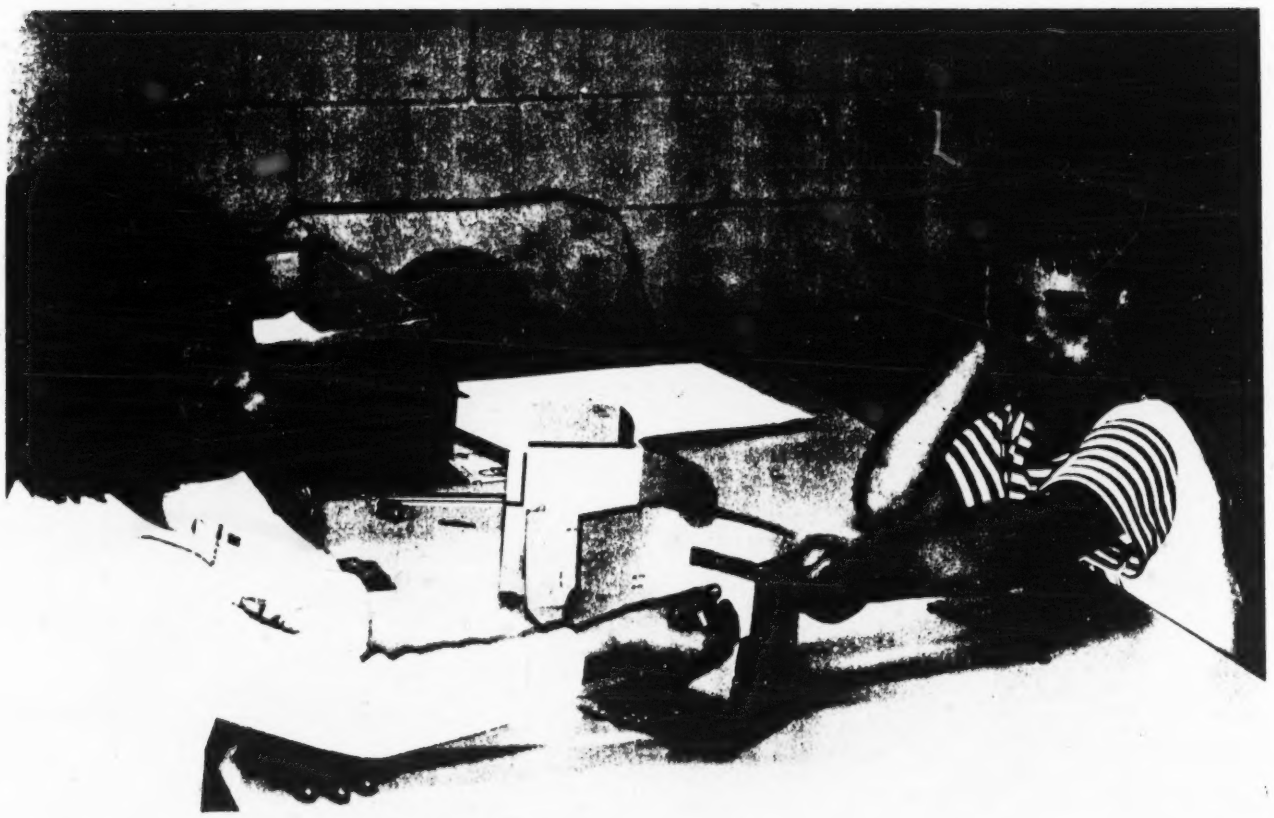

Fig. 1. Showing the happy, active life-style that Jean (right) progressively adopted. She is posting letters in the Mail Box game of the Flying Start Learning-to-Learn Kit.

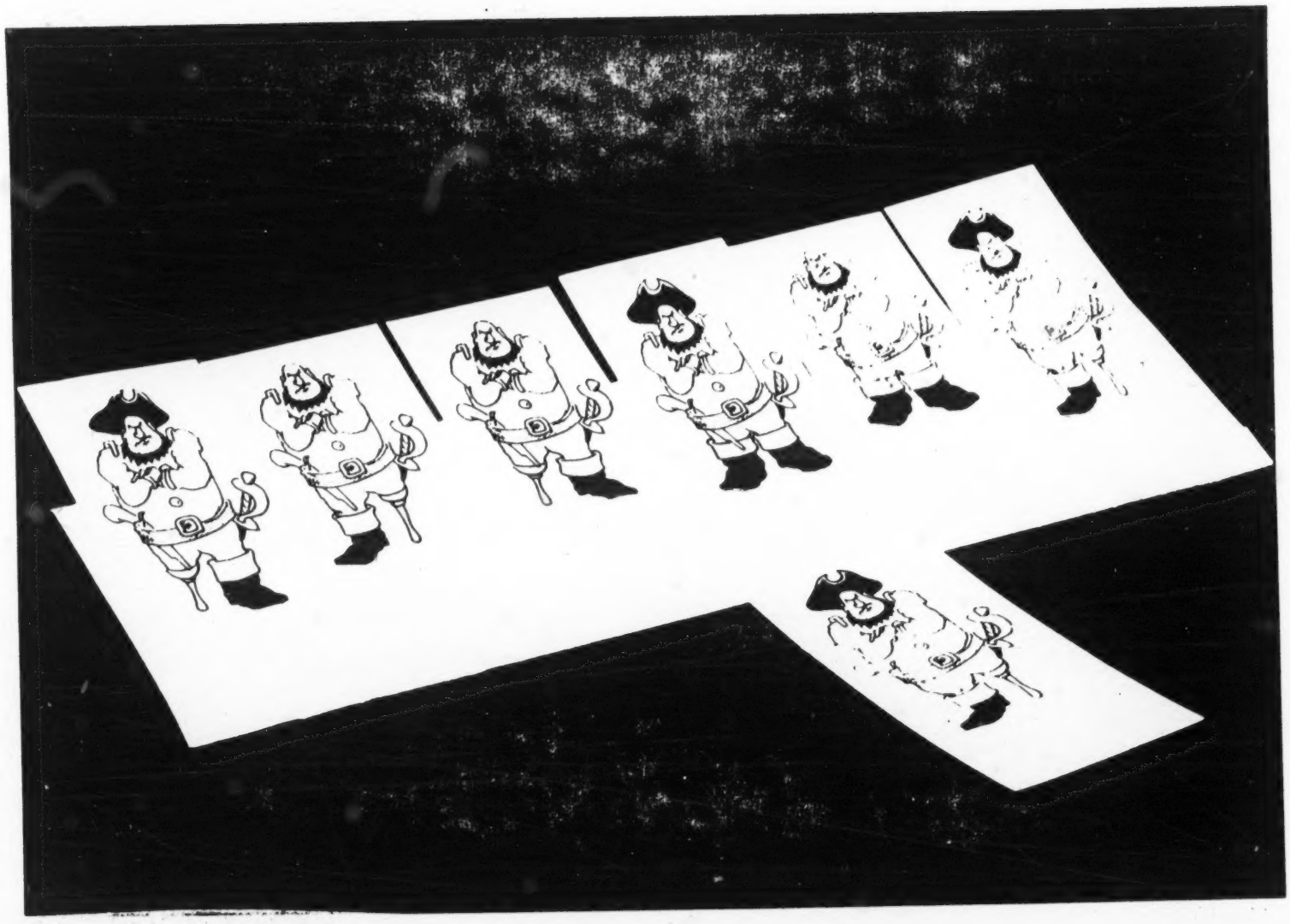

Fig. 2. The Matchers Game in the Flying Start Learning-to-Learn Kit. The card in front has to be matched against one of the six in the row, involving discrimination by three criteria.

Fig. 3. Jean's drawing of "ten apples" and of her family including herself. Compare the hair-style of the top left figure with her own in the photograph.(Fig.1)

REFERENCES

Benton, A.L.: Some aspects of the concept of psychogenic mental deficiency. Proc. London Conference on the Scientific Study of Mental Deficiency. 1962: 243-250, Dagenham, England, May and Baker.

Chess, S.: The role of temperament in the child's development. Acta Paedopsychiatric 34, 91-103, 1967.

Chess, S.: Temperament and learning ability of school children. Amer. J. Pub. Health 58, 2231-2239, 1968.

Downing, J.: Children's concepts of language in learning to read. Educ. Res. 12, 106-112, 1970.

Drillien, C.M. and Wilkinson, E.M.: Emotional stress and mongoloid birth. Devel. Med. Child Neurol. 6, 140-143, 1964.

Garfield, S.L. and Wittson, C.: Some reactions to the revised Manual on Terminology and Classification in Mental Retardation. Amer. J. Ment. Def. 64, 951-953, 1960.

Halpern, A.S.: Some issues concerning the diffferential diagnosis of mental retardation and behavior disturbance. Amer. J. Ment. Def. 74, 796-800, 1970.

Heber, R.: A manual on terminology and classification in mental retardation. Amer. J. Ment. Def., Mon. Suppt. 64, 1959.

Murphy, L.B.: The widening world of childhood. Chicago, Basic Books, 1962.

Nissen, H.W.: Axes of behavioral comparison. In A.Roe and G.G. Simpson (eds.) Behavior and Evolution, New Haven, Yale Univ. Press, 1958.

Sontag, L.W.: Fetal behavior as a predictor of behavior in childhood. Presentation to Annual Meeting of the American Psychiatric Assn. 1962.

Stott, D.H. and Sykes, E.G.: The Bristol Social Adjustment Guides. London, University of London Press; San Diego, Educational and Industrial Testing Service, 1956. (Stott-Marston revision 1971).

Stott, D.H.: Physical and Mental handicaps following a disturbed pregnancy. Lancet 1, May 18, 1006-12, 1957.

Stott, D.H.: An empirical approach to motivation based on the behavior of a young child. J. Child Psychol. Psychiat. 2, 97-117, 1961.

Stott, D.H.: The Programmed Reading Kit. Edinburgh, Holmes-McDougall, 1962.

Stott, D.H.: The Real-Life Ability Scale. Available from Centre for Educational Disabilities, University of Guelph, Ontario, 1963.

Stott, D.H.: The Systematic Interview Guides, London, University of London Press, 1965.

Stott, D.H.: Studies of troublesome children, London, Tavistock Publns.: New York, Humanities Press, 1966.

Stott, D.H. and Sharp, J.D.: Effectiveness-motivation scale. Available from Centre for Educational Disabilities, University of Guelph, Ontario, 1968.

Stott, D.H.: Behavioral aspects of learning disabilities: assessment and remediation. APA Exptl. Publn. System, 11, MS 400-36.

Stott, D.H.: Guide to the child's learning behavior. Available from Centre for Educational Disabilities, University of Guelph, Ontario, 1971a.

Stott, D.H.: Manual to the Bristol Social Adjustment Guides, 4th Edn., London, University of London Press; San Diego, Educational and Industrial Testing Service, 1971b.

Stott, D.H.: The Flying Start Learning-to-learn Kit. Available from Centre for Educational Disabilities, University of Guelph, Ontario, 1971c.

White, R.W.: Motivation reconsidered: the concept of competence. Psych. Rev. 66, 297-333, 1959.